

REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Final Office Action of August 8, 2006.

Reconsideration of the Application is requested.

The Office Action

Claims 3, 4, 7-9, 13, 14, 16, and 19-25 are pending in the application.

Claims 7-9, 13, 14, and 19-21 are rejected under 35 U.S.C. §102(e) as being anticipated by Japanese Reference JP 11-282294 to Akiko.

Claims 8 and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Akiko in view of U.S. Patent No. 6,584,298 to Omoto, et al.

Claims 3, 4, 16, 22, and 23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Akiko in view of U.S. Patent No. 6,580,896 to Lee.

Claims 9 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Akiko in view of U.S. Patent No. 5,984,848 to Hyllberg, et al.

For the reasons outlined below, it is submitted that the claims are in condition for allowance.

Claim 14 now recites a method of fusing a marking agent to an image receiving medium including inductively heating a wall of a heat pipe defining a sealed hollow cavity containing a working fluid and applying heat from the heat pipe to a page of the image receiving medium carrying the marking agent thereon including contacting the page with the heat pipe. The inductive heating step includes electrically energizing an electrical coil inductively coupled to an outer periphery of the heat pipe.

There is no suggestion in Akiko of an inductive heating step which includes electrically energizing an electrical coil inductively coupled to an outer periphery of a wall of a heat pipe which defines a sealed hollow cavity containing a working fluid. The Akiko reference (Abstract) discloses a fixing device comprising a heat pipe 1a and a magnetic pipe 1b arranged to cover an outside circumference of the heat pipe and surround the whole outside circumference of the heat pipe. Thus, the heat pipe of Akiko does not contact the page to be fused. It should be noted that Applicant does not have the benefit

of a full translation of the Akiko reference, and thus all arguments are based on the Abstract supplied by the Examiner and accompanying drawing. Should Applicant have misinterpreted the Akiko reference, the Examiner is invited to send a copy of the full translation of Akiko, to which the Examiner refers in the rejection.

An advantage of the claimed method is that a shorter warm up time is possible than in the device of Akiko, where both the pipe and the heat pipe provide a mass which is to be heated.

Accordingly, it is submitted that claim 14, and claims 13 and 16 dependent therefrom, distinguish over the reference of record.

Claim 19 has been amended and now recites a fusing station including an electrical coil inductively coupled to and surrounding an outer periphery of an end of a heat pipe and means for pressing a page of toner carrying image receiving medium to a portion of the heat pipe spaced from the end. Support for the amendments to claim 19 is to be found in paragraph [0021] and FIGURE 3.

Akiko makes no suggestion of such a fusing station. Akiko requires a metallic pipe external to the heat pipe to provide rigidity. None of the references of record teaches inductive heating of a heat pipe to which a page of toner carrying image receiving medium is pressed.

Accordingly, it is submitted that claim 19, and claims 20 and 24 dependent therefrom, distinguish over the references of record.

Claim 21 has been amended to incorporate subject matter of claim 24 and now recites a fusing station including a fuser roller configured as a heat pipe. A wall of the fuser roller is formed from an electrically conductive material having a thickness less than or equal to approximately 0.3 mm and defines a sealed hollow cavity containing a working fluid whereby in operation the wall is pressurized by the fluid. A pressure roller forms a nip with the fuser roller through which the image receiving medium passes. An electrical coil is inductively coupled to the wall of the fuser roller to inductively heat the wall of the fuser roller upon energizing the electrical coil with electrical power, wherein the electric coil surrounds an outer periphery of the fuser roll.

Claim 21 was previously rejected over Akiko and claim 24 was previously rejected over the combination of Akiko with Omoto. Akiko makes no suggestion of a wall of fuser

roller having a thickness of less than or equal to approximately 0.3 mm, as acknowledged by the Examiner. Omoto discloses a fixing device in which a wall 41 may have a thickness as low as 0.5 mm. However, the wall 41 does not define a sealed hollow cavity. There is no vapor pressure on the wall 41 of Omoto. Accordingly, there is no motivation for combining Omoto with Akiko as there is no motivation in either reference for providing a fuser roller with a thin wall which is pressurized by fluid in operation.

Accordingly, it is submitted that claim 21, and claims 3, 4, 7-9, 22-23, and 25 dependent therefrom, distinguish patentably and unobviously over the references of record.

CONCLUSION

For the reasons detailed above, it is submitted all claims remaining in the application are now in condition for allowance.

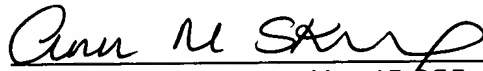
No additional fee is believed to be required for this Amendment C. However, the undersigned attorney of record hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Deposit Account No. 24-0037.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call the undersigned, at Telephone Number (216) 861-5582.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP

November 7, 2006
Date


Ann M. Skerry, Reg. No. 45,655
1100 Superior Avenue, 7th Floor
Cleveland, Ohio 44114-2579
(216) 861-5582

CERTIFICATE OF MAILING

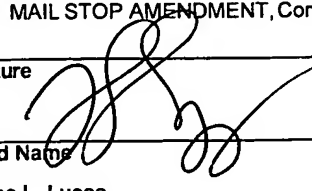
Under 37 C.F.R. § 1.8, I certify that this Amendment Transmittal Letter and accompanying document(s) are being

☒ deposited with the United States Postal Service as First Class mail, addressed to: MAIL STOP AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

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